## REMARKS

The Office Action of December 7, 2007 has been received and its contents carefully considered.

The present Amendment cancels dependent claim 7 and transfers its subject matter to independent claim 5. The Amendment also revises the claims to improve their form under US claim-drafting practice.

The Office Action rejects all of the claims for anticipation by published US application 2003/0086613 to Kaneko et al. This reference will hereafter be called simply "Kaneko" for the sake of convenient discussion. For the reasons discussed below, it is respectfully submitted that the inventions defined by independent claims 1 and 5 are patentable over this reference.

With reference to claim 1, Kaneko fails to disclose "a block defining module, performing a block locating process according to a selection input by the user on a display page frame of a video data selection, and creating a link record in a corresponding relation data document of the video data selection;" and "a relation generating module, wherein the relation generating module according to a block location information performs a tracking and defining process of similar block locations in following page frames of the video data selection, and adding definition results in corresponding relation data documents." been detected by performing block matching." (see Kaneko's paragraph [0099]).

In Kaneko, "[t]he region extracting portion 101 extracts an object region in each frame corresponding to the movement or deformation of the object of interest. ... [D]eformation and movement of the overall body of an object are estimated in accordance with a position to which a partial object region has been moved and which has The present Amendment cancels dependent claim 7 and transfers its subject matter to independent claim 5. The Amendment also revises the claims to improve their form under US claim-drafting practice.

In contrast, in Applicants' system, a block defining module 140 proceeds to block locating according to the user's selection/input of the display page frames of the video data selection, and generates link records 830, stored in the relation data document 820

corresponding to the video data selection. (see lines 17-20 on page 5 of the present application). According to the block location data generated by the block defining module 140, a relation generating module 150 then tracks and defines similar block locations in the following page frames of the video data selection. The definition results then are added to the relation data document 820 corresponding to the video data selection. Generally, it may happen that a same block location of a video data selection appears in different page frames. To avoid repeating the same block locating manipulation, the relation generating module 150 according to factors such as the direction of movement, locations, etc., implements spatio-temporal matching techniques to infer the positions in other page frames where the same block location may appear. The relation-generating module 150 then defines the block location found in the following page frame according to the link record 830 of the block location of the previous page frame. All the same block locations in the entire video data selection thereby are set with the same link relation (see lines 4-15 on page 6 of the present application).

As for independent claim 5, Kaneko fails to disclose "performing a block locating process in the display page frame, the step of performing a block locating process including: determining optical flow properties of a block location according to the position information of the display page frame, generating a block boundary according to the optical flow properties, performing a block feature extraction, and performing a clustering process, and creating the block location. The reference also fails to disclose "creating a link record of the display page frame, and saving it in a relation data document;" "performing a tracking and defining process on following page frames of the video data selection;" and "creating the relation data document of the video data selection."

To avoid repeating the same block locating manipulation, a tracking and defining process (step 500) is performed on the following page frames of the video data selection to define a link record 830 for all the similar block locations in the same video data file. First, block location information is read (step 510). This block location information includes block boundary data and link record 830 data. Spatio-temporal techniques then are implemented to track the same block location in the next page frame (step 520).

According to the factors such as the movement direction, speed, location, etc., the spatio-temporal techniques infer the position in the next page frame where the block location is likely to appear. Then it is determined whether the same block location is actually found therein (step 530). In Applicants' system the location data of the display page frame corresponding to a video data selection are analyzed (step 200). The location data are coordinate data, which are generated when the user triggers a sensitive display device or a pointing positioning device.

According to the coordinate data, a block locating process is performed in the display page frames (step 300). After the block location has been determined, the user selects or inputs the video files or sections to be subjected to a link relation. The link records 830 of the display page frame, once being generated, are stored in the relation data document 820 (step 400). Subsequently, a tracking and defining process is performed on the next page frames of the video data selection (step 500). After the link definition has been achieved for the block locations found in the following page frames, the finally created relation data document 820 is saved up (step 600), which completes the interactive video data generating flow.

As to the block locating process, first, optical flow properties of a block location are determined according the position data of the display page frame (step 310), i.e. the optical flow properties at the location selected by the user are determined. According to the optical flow properties, an initial block boundary is created (step 320), which is performed by using an optical flow analysis. A feature extraction step is then applied on the initial block boundary (step 330), to eliminate contents without similar features. Lastly, a clustering treatment is performed (step 340), using adaptive bounding techniques to mark up the remaining pixels with the same features, and thereby generate the exact block location (step 350).

If no similar block location is found, tracking step 520 continues, otherwise the block location data are resolved (step 540) to determine the position data of the block location. The newly found block location is defined according to the link record 830 previously set by the user (step 550). The above steps 520 to 550 are repeated until the

tracking and a defining process is achieved for the entire video data selection (see present invention, line 18 on page 6 to line 1 on page 8).

In summary, it is respectfully submitted that Kaneko does not disclose the "block defining module" and the "relation generating module" of independent claim 1, or the "performing a block locating process" step, the "creating a link record" step, the "performing a tracking and defining process" step, and the "creating the relation data document" step of independent claim 5. Nor would the reference have motivated an ordinarily skilled person to achieve the invention of claim 1 or claim 5. The remaining claims are dependent claims that recited additional limitations to further define the invention, so they are automatically patentable along with their independent claims.

For the foregoing reasons, it is respectfully submitted that this application is now in condition for allowance. Reconsideration of the application is therefore respectfully requested.

Respectfully submitted,

Allen Wood

Allen Wood
(Registration No. 28,134)
Customer number 23995
Rabin & Berdo, P.C.
Telephone: (202) 371-8976
Facsimile: (202) 408-0924

AW/ng